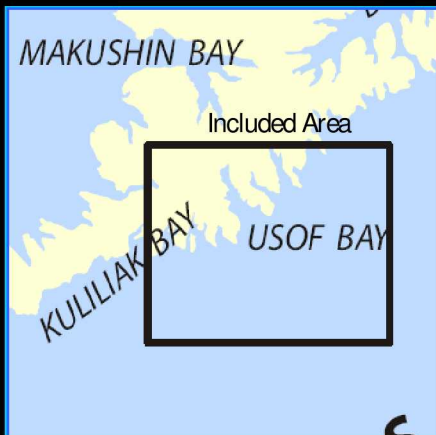


BookletChartTM

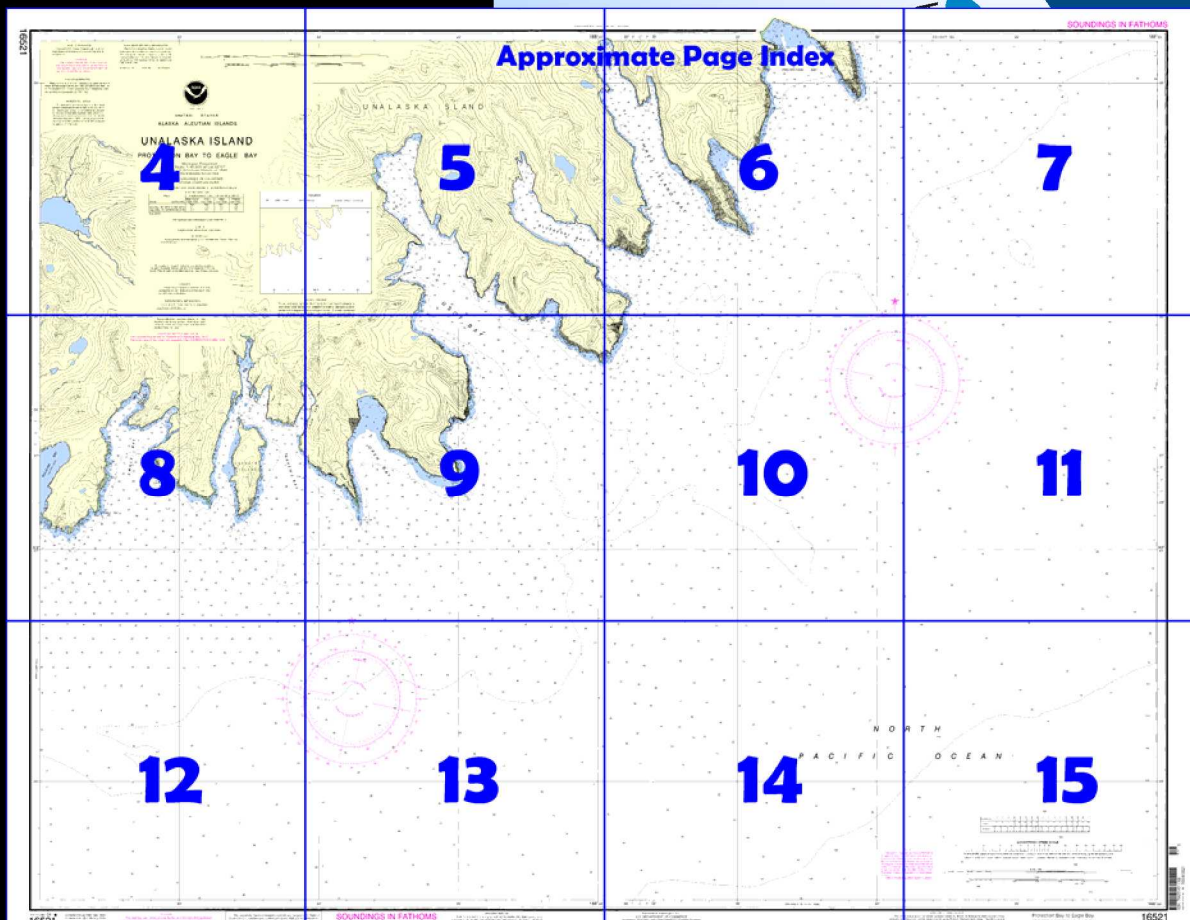
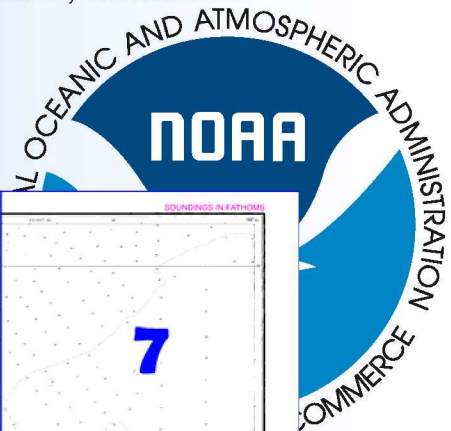
Unalaska Island Protection Bay to Eagle Bay

(NOAA Chart 16521)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

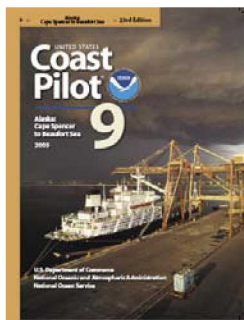
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 9, Chapter 7 excerpts]

(403) From Kayak Cape W the shoreline trends to the SW and is deeply indented by several large bays, affording various degrees of protection. Only two of these, Usof Bay and Blueberry Bay, are considered to give adequate protection from all kinds of weather. Raven Bay is landlocked at the head and gives excellent protection for small craft.

(404) **Protection Bay**, just W of Kayak Cape, extends about 2 miles inland. There is a slight hook to the W at the head of the bay, giving

some protection for small craft from the S. Rocks extend 500 yards SE off the point of the hook. This bay has the least shelter of any in the vicinity, but its depth is more convenient for anchoring.

(406) **Three Island Bay**, W of Cape Yanaliuk, extends inland for about 5 miles in a NNW direction; it affords fair protection for small craft in any weather in 8 to 15 fathoms at the head of the bay, behind three small

islands which give the bay its name. Deep water carries through to the head of the bay between the islands. Care must be exercised not to anchor too close to the rocks N of the E island, nor to the shoal water at the N end of the bay. Swinging room is restricted for vessels exceeding 100 feet in length, and the area affords only fair anchorage and protection for small craft. It is subject to violent williwaws, and in S weather a rather heavy swell from outside makes it uncomfortable. **Foam Cove**, 1 mile above the W entrance point, provides fair temporary anchorage near the mouth of a stream which shows conspicuously from the bay entrance. (407) **Blueberry Bay**, the next bay W of Three Island Bay, extends inland in a NW direction for about 3 miles. A fairly sharp turn to the N for about 1 mile makes the head of the bay landlocked and affords good shelter. The upper half of Blueberry Bay has a rugged shoreline characterized by narrow gravel and boulder beaches, or rocky shoreline with smooth rock slopes. Anchorage may be had in 15 to 20 fathoms in the middle of Blueberry Bay about 0.5 mile below the head in good holding bottom. The swinging room is entirely adequate for small craft and should suffice for ships of moderate size. Being entirely landlocked, there is almost entire freedom from swell. Winds are generally more moderate than in nearby localities and, as far as is known, never blow across the bay. Water is available.

(410) Good anchorage for small craft is found in **Johnson Cove**, at the mouth of a canyon on the W side about 5 miles in from the entrance, in 7 to 10 fathoms, mud bottom. The S arm of Johnson Cove should be avoided as it is shallow and filled with rocks. To the N of the canyon is a conspicuous cascade.

(414) **Open Bay** is the bight between Cape Prominence and Reef Point. It has anchorage for large or small vessels in 20 to 5 fathoms with good holding ground and sufficient swinging room. It affords limited protection from the SW and E, but none from the S and SE.

(415) **Reef Point** is easily identified by a conspicuous cathedral rock, 240 feet high, just off the S extremity. A ledge, just a few feet above high water, extends 0.5 mile off the point. No dangers were noted outside of this ledge. All of this ledge is not above high water; the depth is 5 fathoms between the outer end and inner parts. The outer end is a reef which is continually awash, because of the ocean swell, at all stages of the tide, but may actually be 2 feet above low water.

(417) E of Ogangen Island, the bay narrows from a width of 2 miles at the entrance to 0.3 mile at the N end of the island; depths are 25 to 40 fathoms. NE of the island, **Crow Arm**, narrow and stocking-shaped, extends 1 mile to the N; the arm is too deep for the restricted swinging room and is subject to considerable swell during S weather.

(418) The W arm of Raven Bay narrows to 250 yards 0.6 mile N of Ogangen Island and continues N for another mile; excellent anchorage for small boats may be had in 3 fathoms just S of the prominent islet at the head of the arm. The sandflats at the extreme head are suitable for beaching small craft.

(419) The small cove W of the middle part of the narrows affords anchorage for small boats in 3 to 5 fathoms, but the swinging room is restricted by the reef on the W side. At the head of the cove are abandoned saltery buildings.

(425) Good anchorage may be had in Eagle Bay, but the S swell is often uncomfortable. Anchorage with protection from all weather is available below the island in the N arm, but swinging room is limited. Depths of 11 fathoms extend into both arms of the bay; however, broken bottom with a 3¼-fathom spot extends from Snipe Point almost halfway across the entrance to the N arm.

(428) A shoal, with 14 fathoms 0.4 mile from shore, makes out to S from the most S tip of Eagle Point. Passing vessels are advised to stay at least 0.5 mile off the cape in order to keep outside the 20-fathom curve.

(429) Appreciable tidal current was noted for a distance of 1 mile off Eagle Point. The flood sets W and the ebb E. With an appreciable swell running against this current, high, sharp, broken seas, with curling tops resembling tide rips, were noted off the point.

Table of Selected Chart Notes

HEIGHTS
Heights in feet above Mean High Water.

Corrected through NM Sep. 18/04
Corrected through LNM Aug. 31/04

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 3.094" southward and 6.747" westward to agree with this chart.

For Symbols and Abbreviations see Chart No. 1

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Unalaska, AK WXK-89 162.55 MHz

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 9 for important supplemental information.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 9. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.
Refer to charted regulation section numbers.

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

Mercator Projection
Scale 1:40,000 at Lat 53°27'
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8902 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

The contour lines are hill shapes, sketched to afford the navigator a generalized indication of the character of the land forms. They should not be relied upon as lines of equal elevation.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey.

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

Additional information can be obtained at nauticalcharts.noaa.gov.

UPDATING SERVICE
FOR THIS CHART, a listing of NOTICE TO MARINERS (NM) corrections subsequent to the NM corrected through date shown in the lower left hand corner, is available from the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

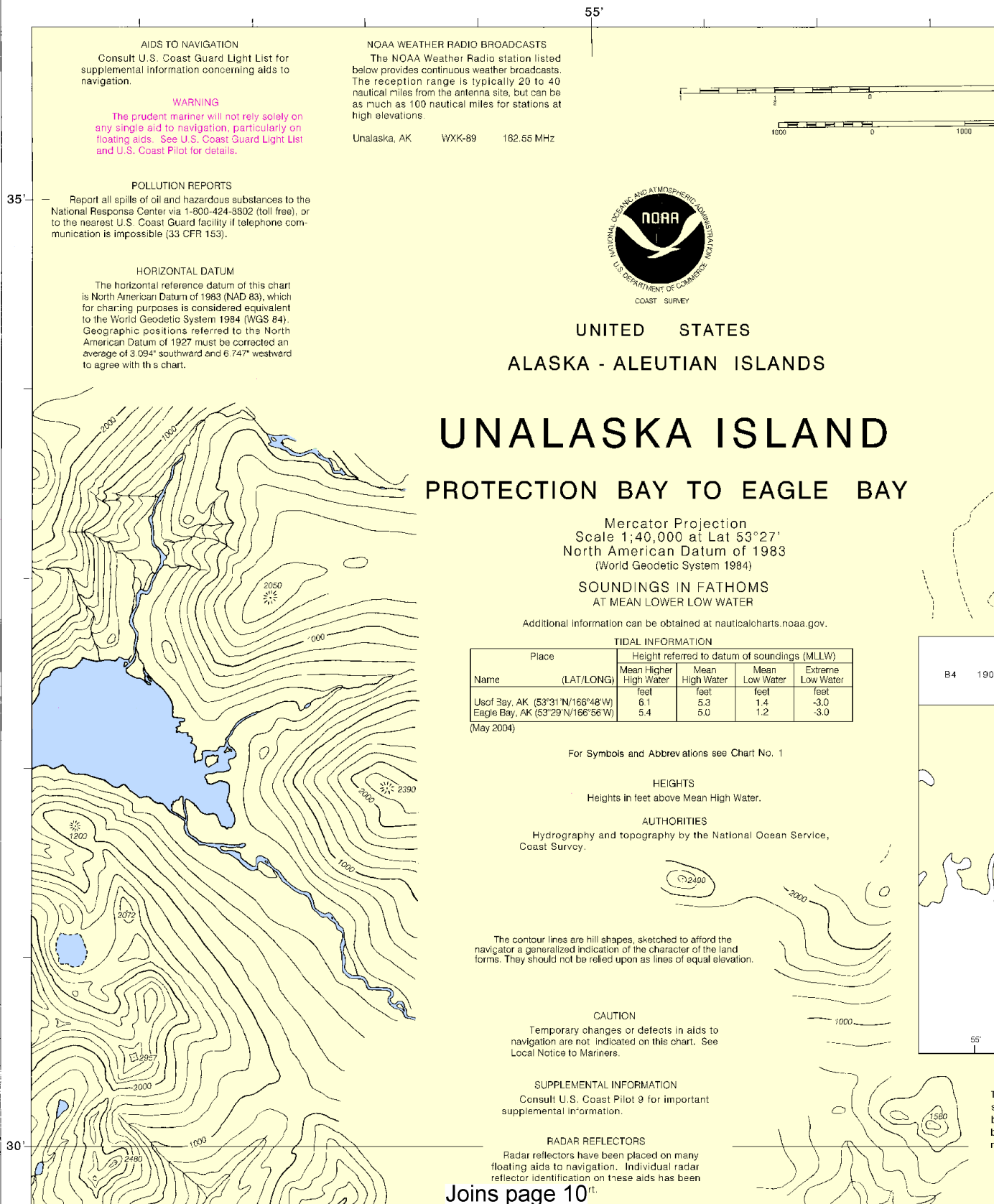
COLREGS, 80 1705 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

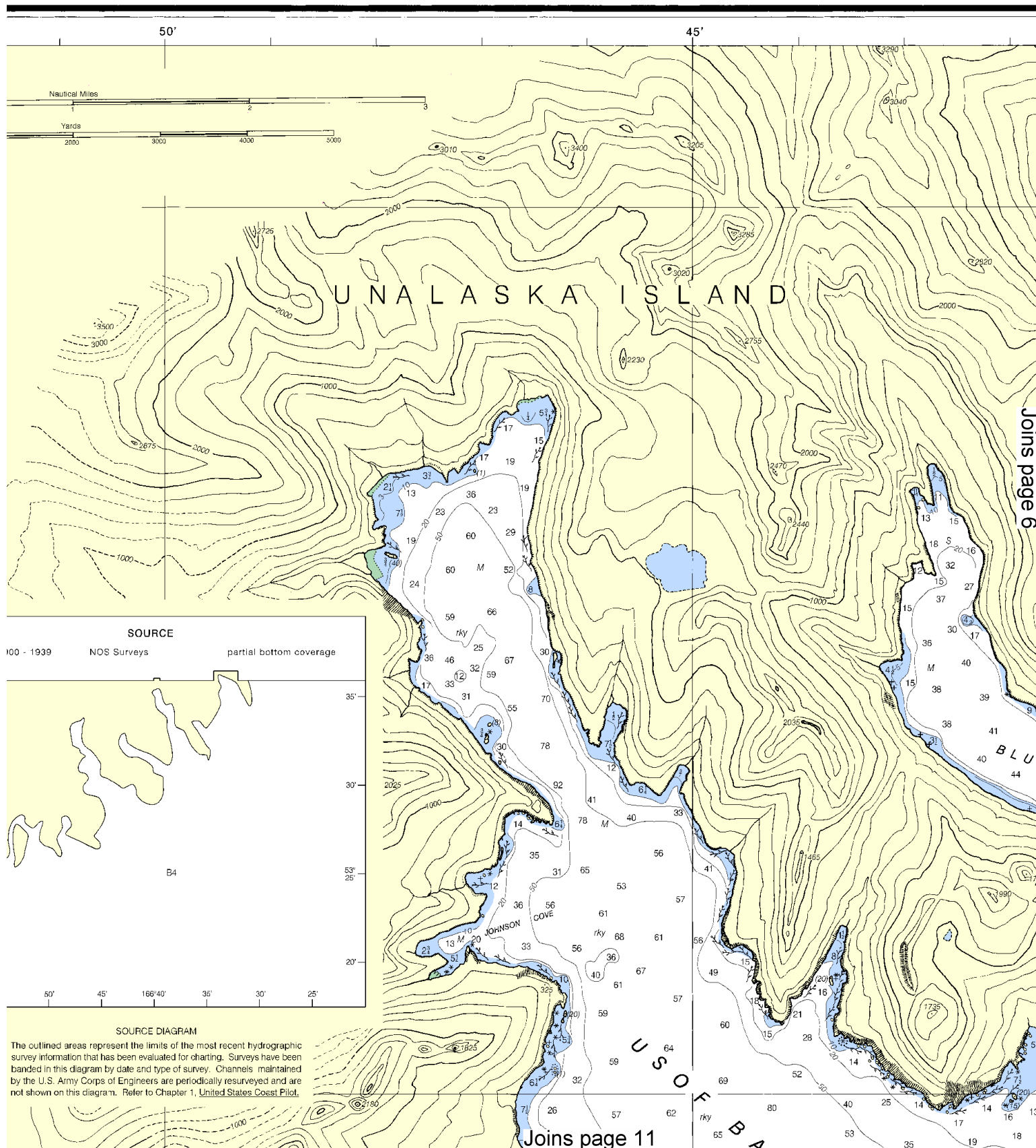
TIDAL INFORMATION					
Place Name (LAT/LONG)	Height referred to datum of soundings (MLLW)				
	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water	
Usot Bay, AK (53°31'N/166°48'W)	feet 6.1	feet 5.3	feet 1.4	feet -3.0	
Eagle Bay, AK (53°29'N/166°56'W)	5.4	5.0	1.2	-3.0	

(May 2004)

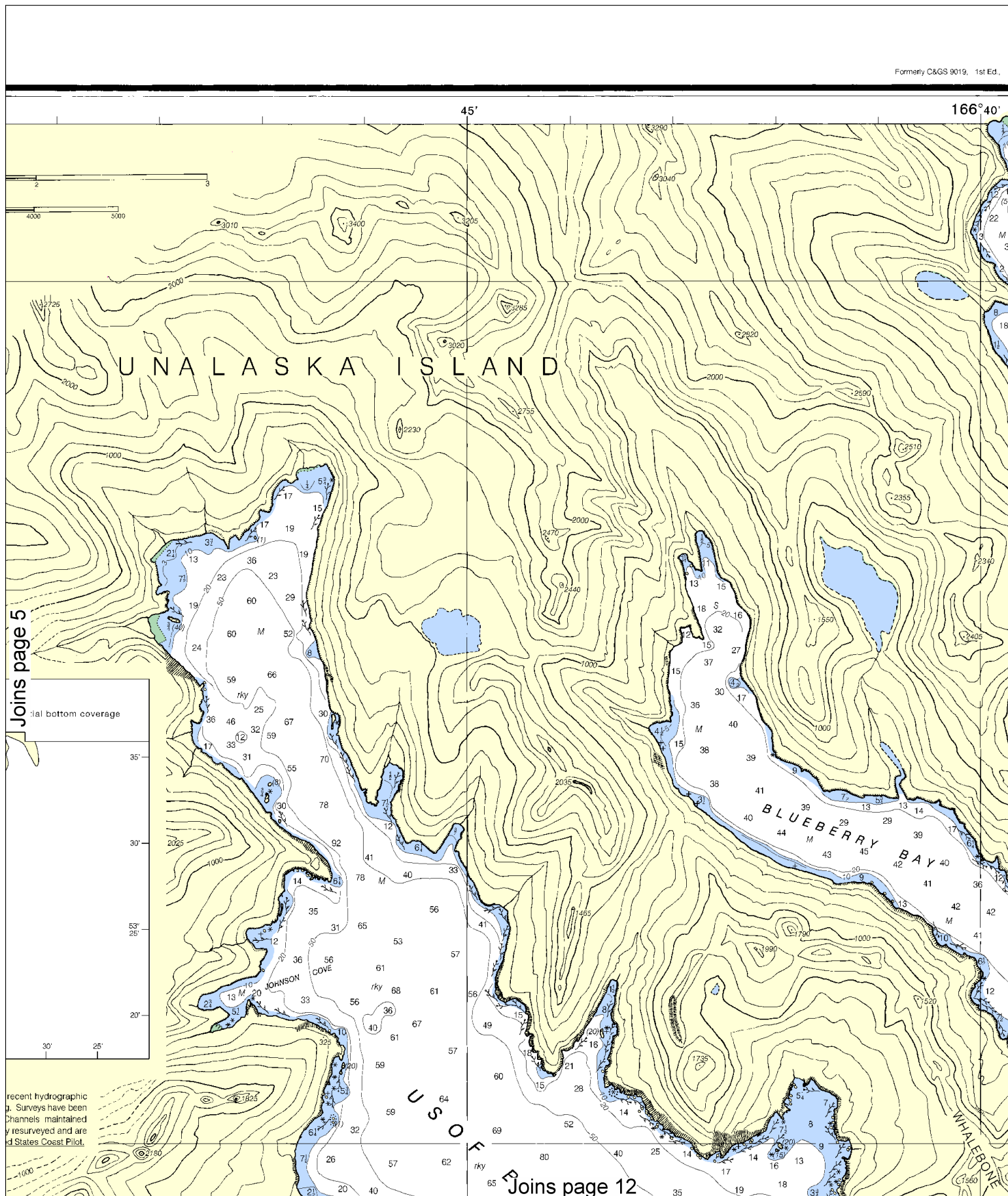
This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

PRINT-ON-DEMAND CHARTS
This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

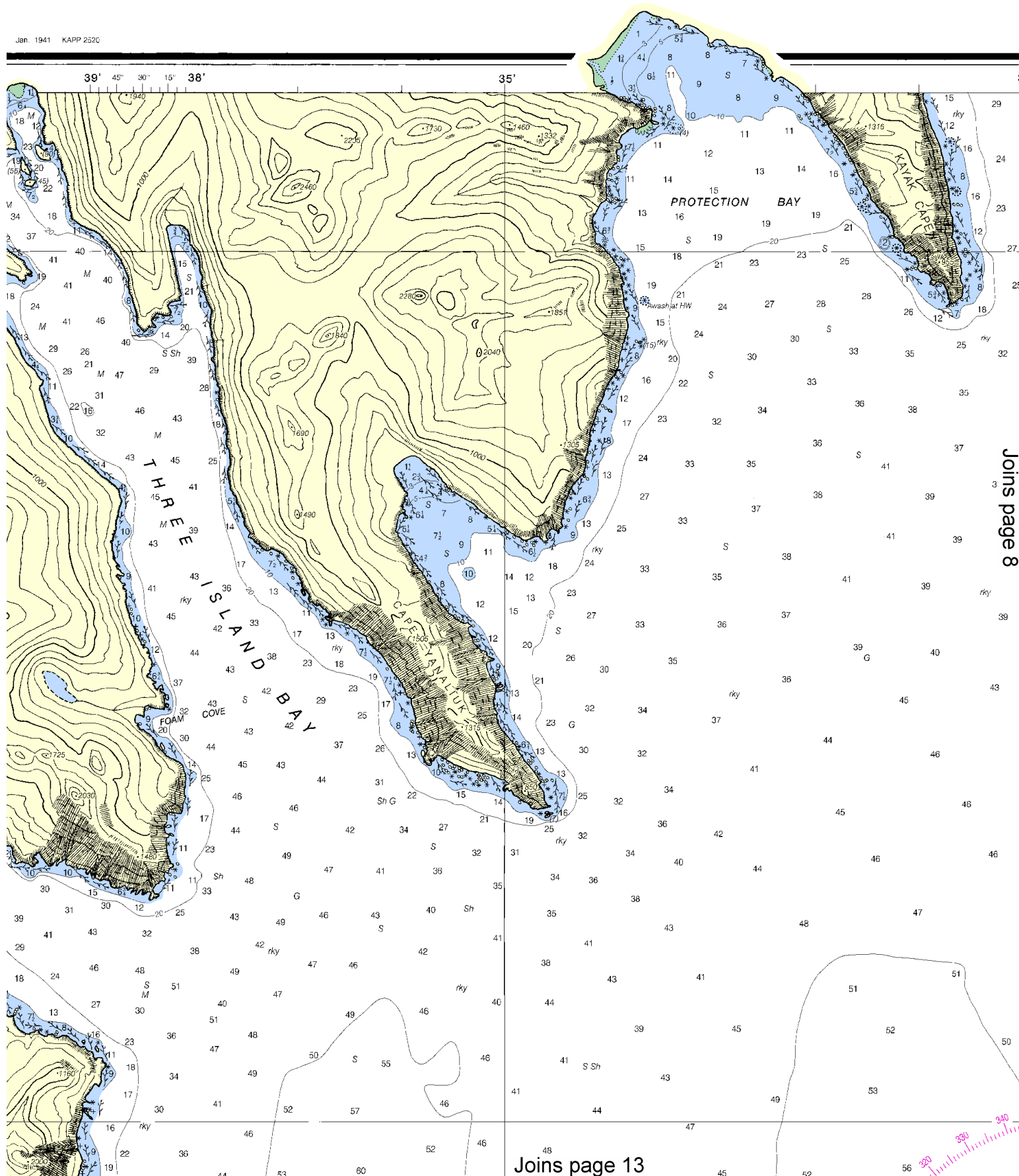




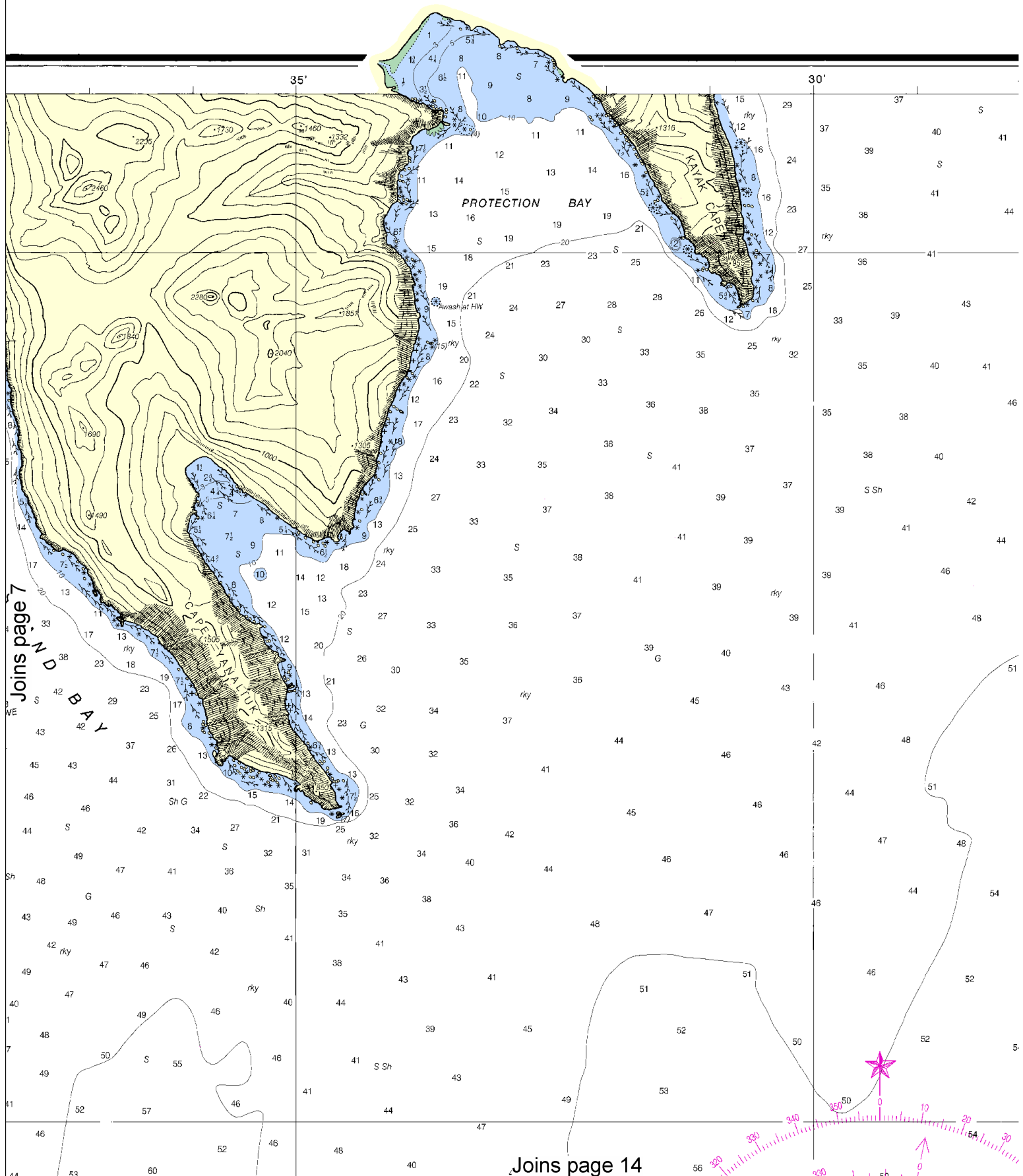
This BookletChart was reduced to 75% of the original chart scale.
 The new scale is 1:53333. Barscales have also been reduced and
 are accurate when used to measure distances in this BookletChart.



recent hydrographic
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Channels maintained
y resurveyed and are
d States Coast Pilot.



This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0511 2/1/2011,
 NGA Weekly Notice to Mariners: 0611 2/5/2011,
 Canadian Coast Guard Notice to Mariners: 0111 1/28/2011.



8



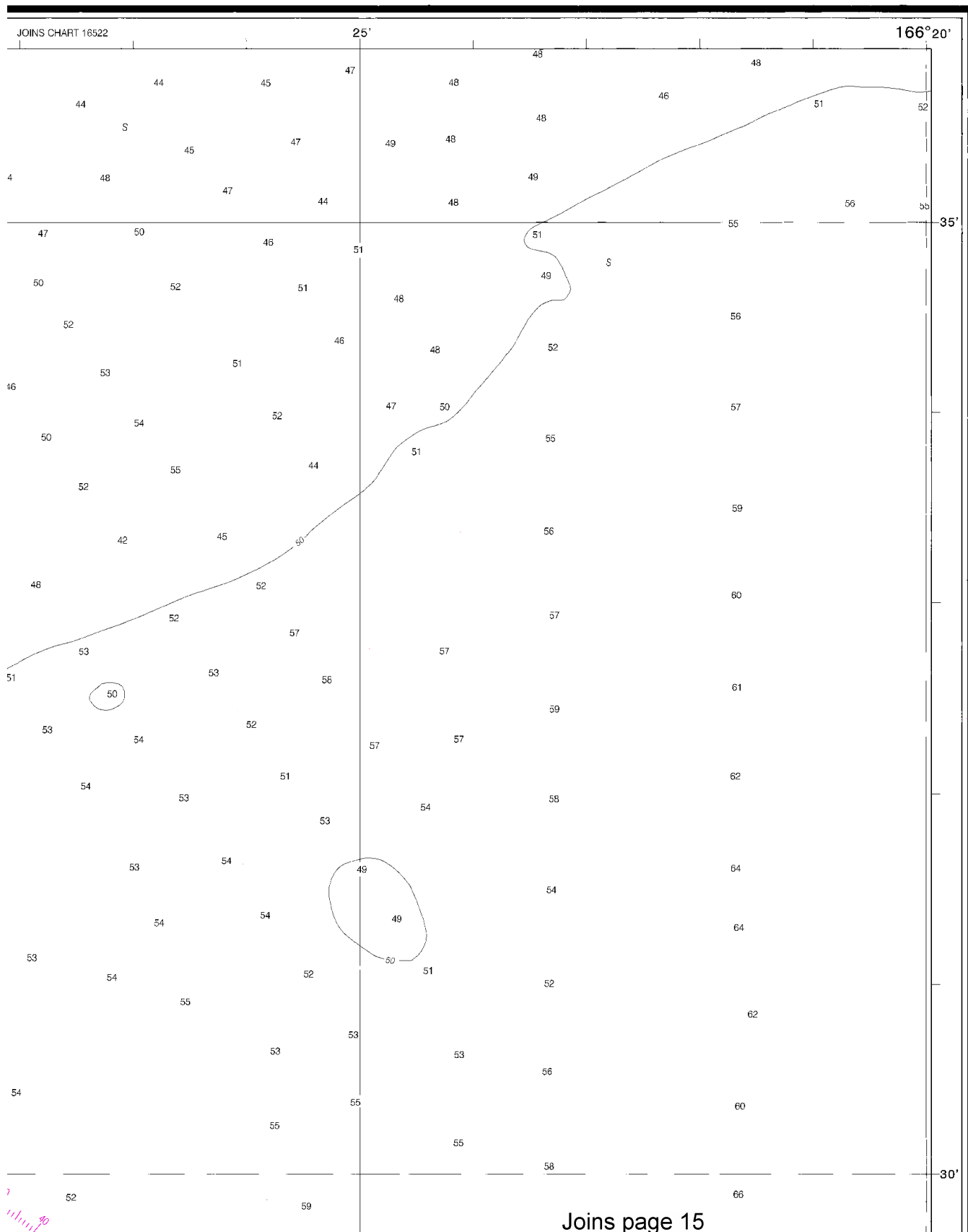
Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



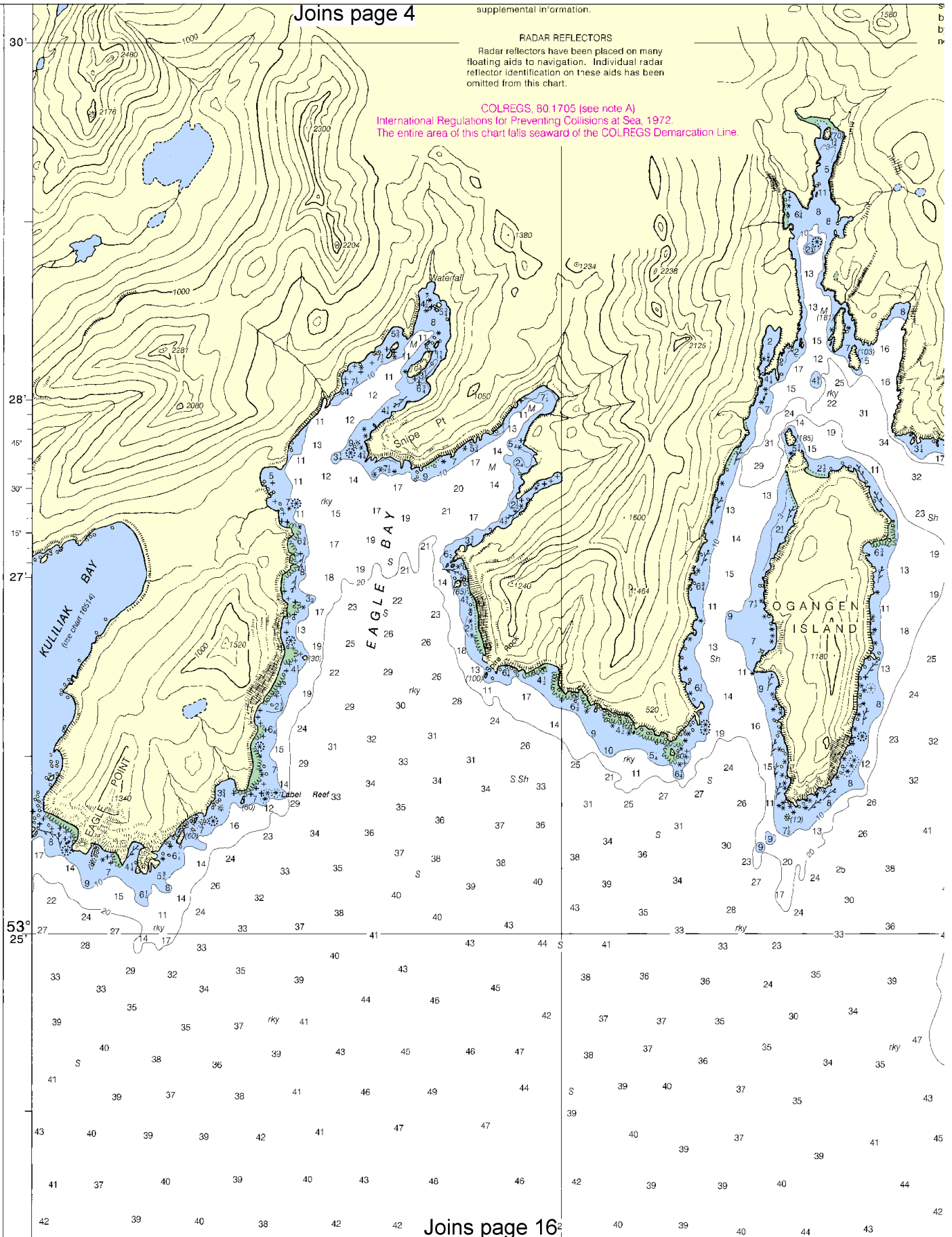
SOUNDINGS IN FATHOMS



RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

COLREGS, 80.1705 (see note A)
International Regulations for Preventing Collisions at Sea, 1972
The entire area of this chart falls seaward of the COLREGS Demarcation Line.



10



Printed at reduced scale.

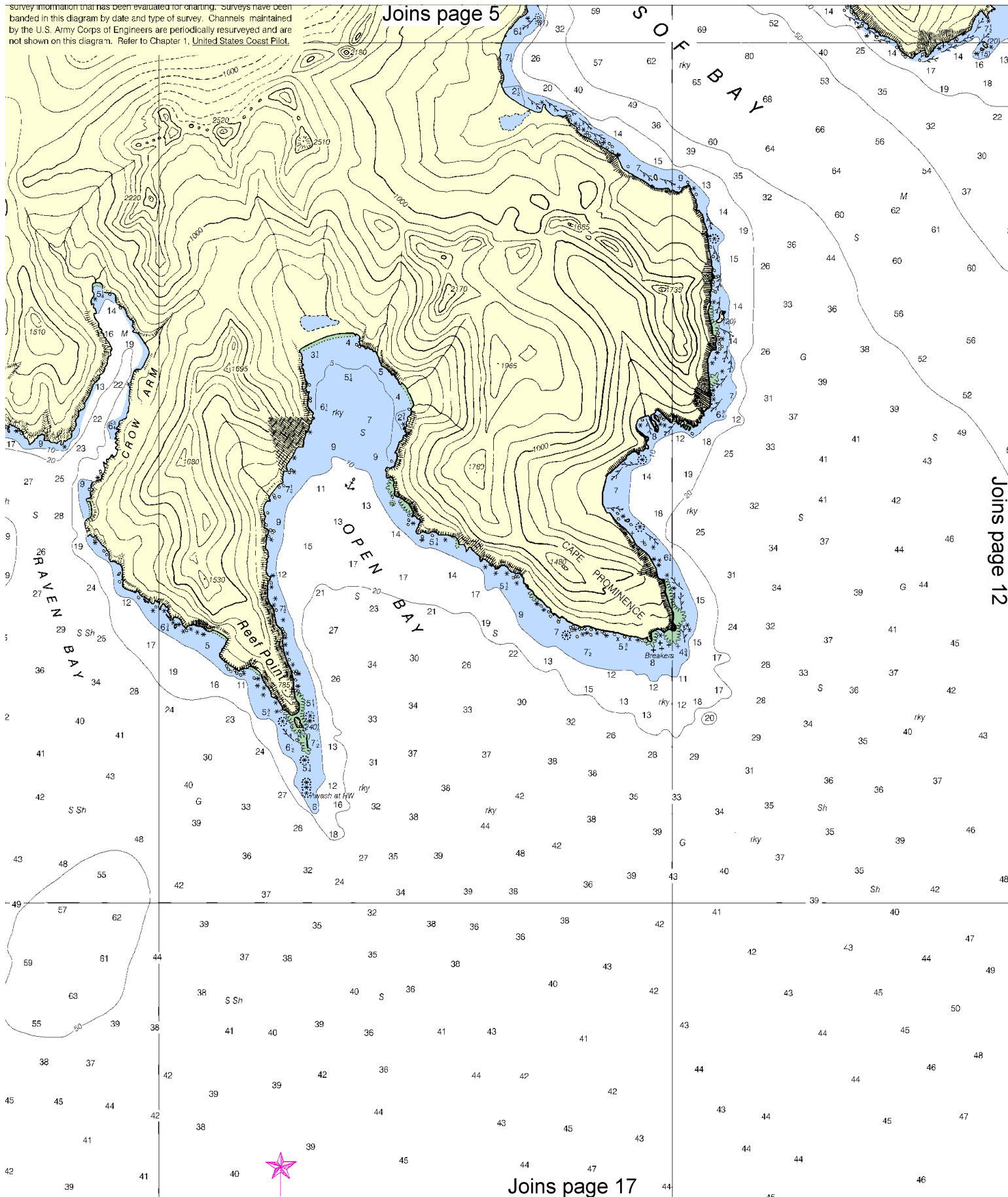
SCALE 1:40,000
Nautical Miles

See Note on page 5.



survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

Joins page 5

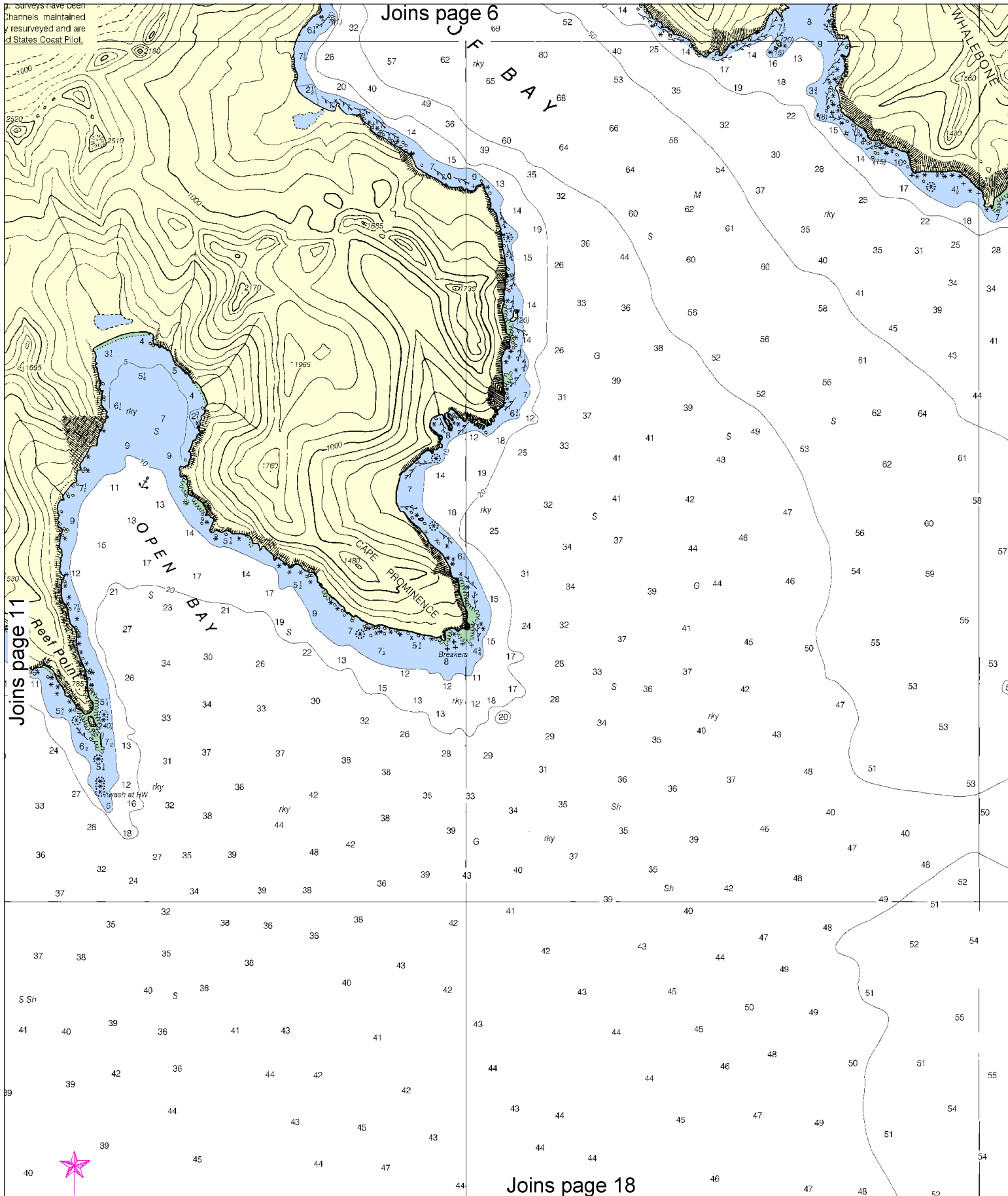


Joins page 12

Joins page 17

Surveys have been
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Joins page 6



Joins page 11

Joins page 18

12

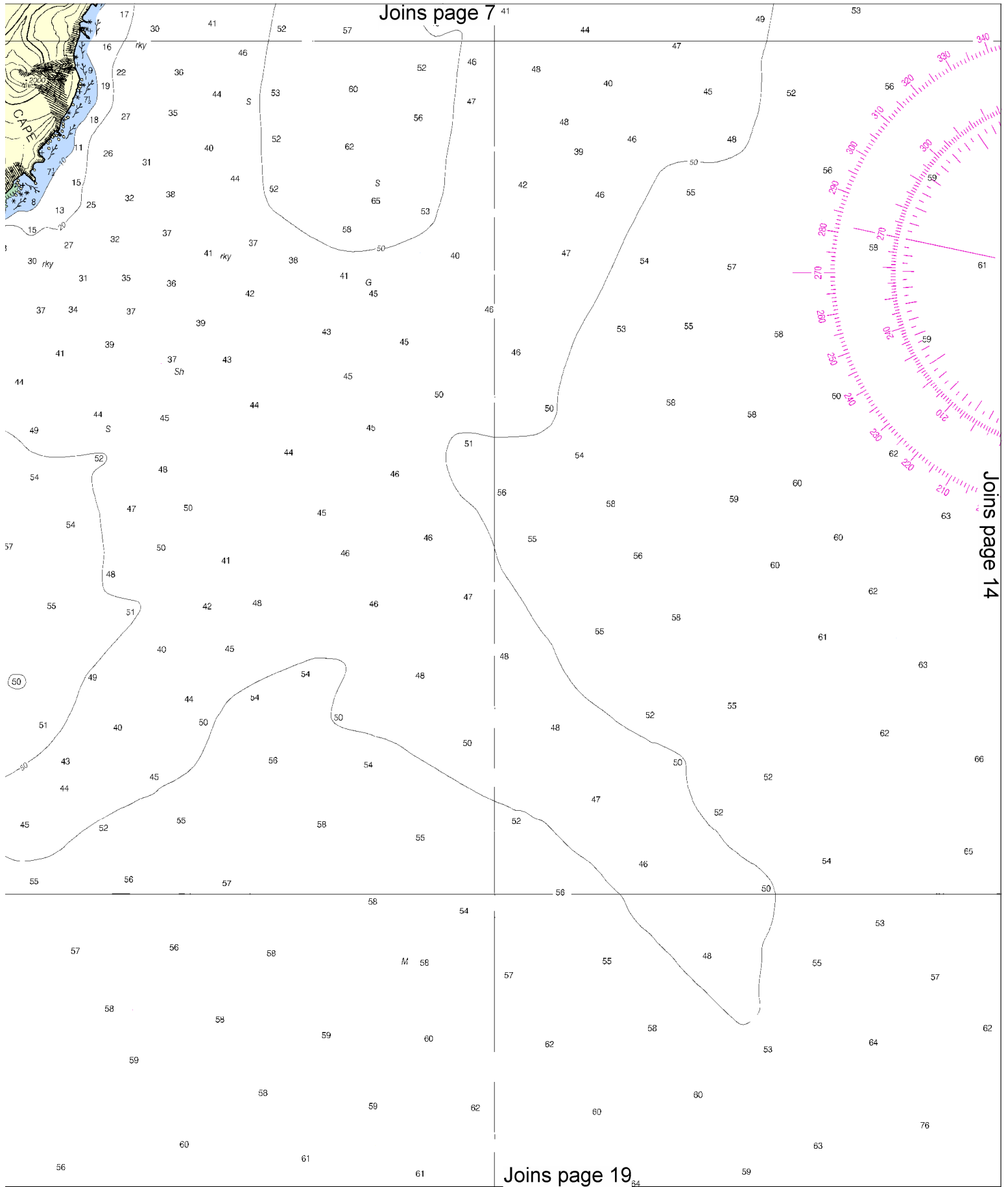


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SCALE 1:40,000
Nautical Miles

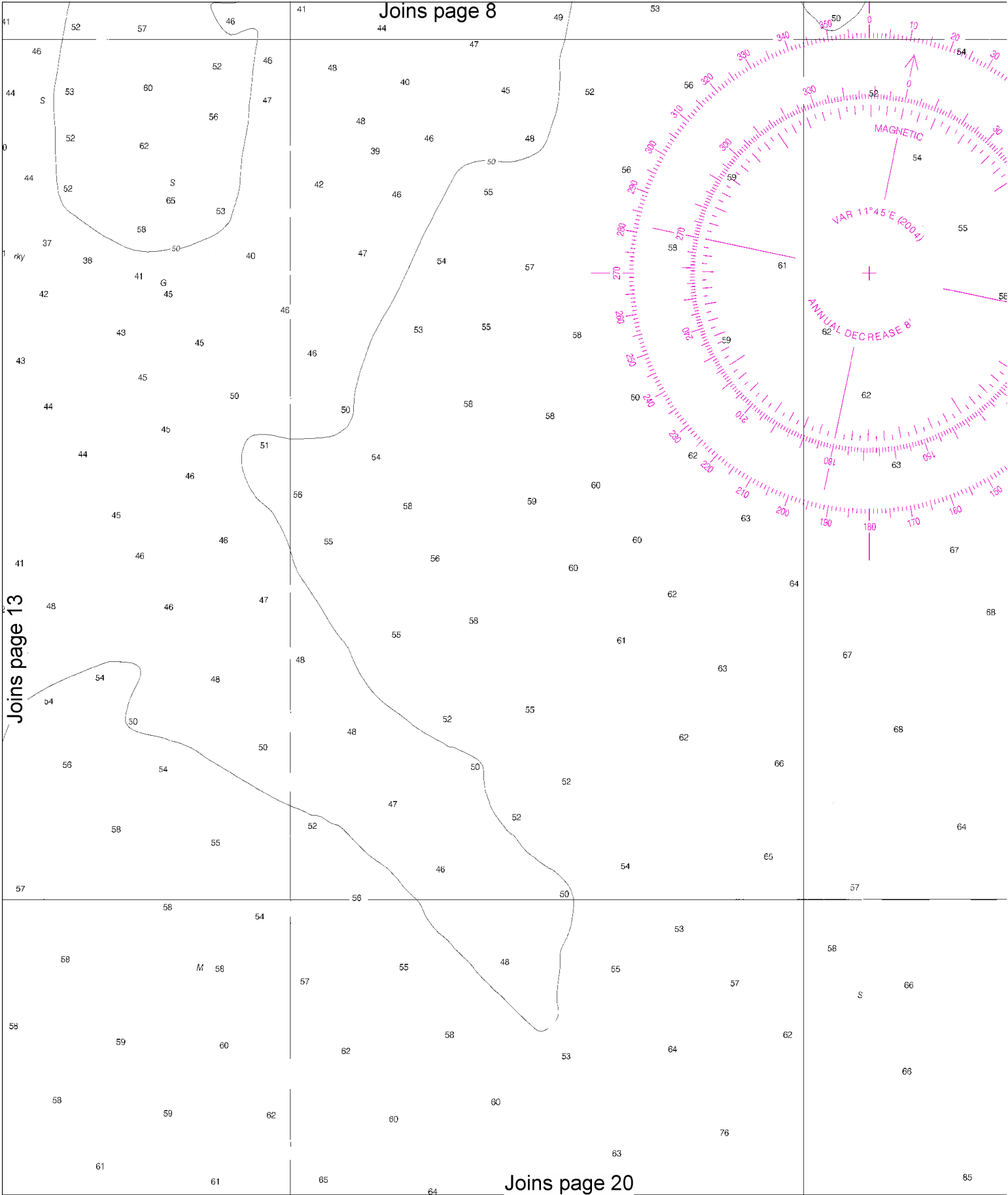
See Note on page 5.



Joins page 7 ⁴¹

Joins page 14

Joins page 19₆



14

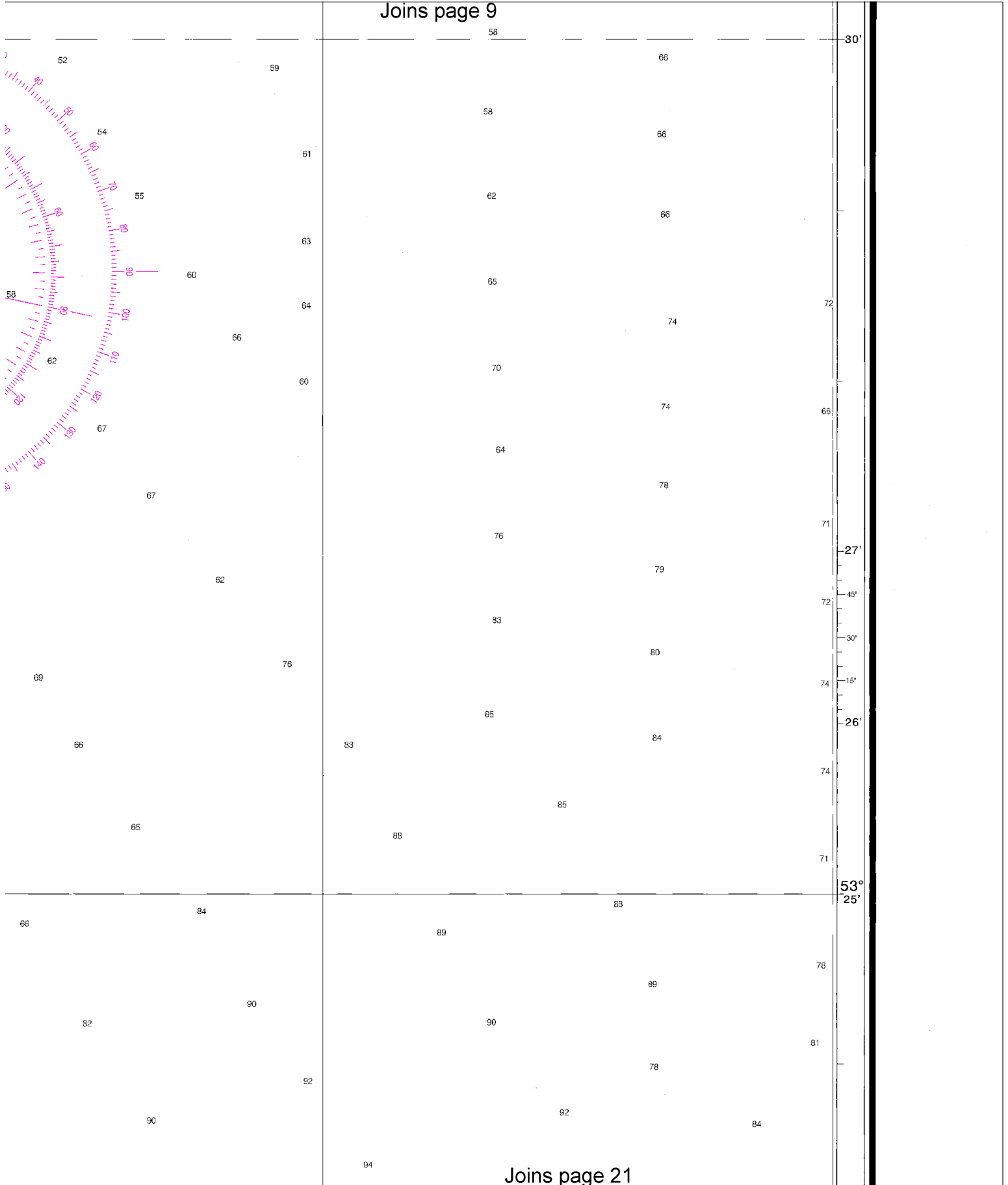


Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.





Joins page 10

JOINS CHART 16521

20'

55'

6th Ed., Sep./04
16521

Corrected through NM Sep. 18/04
Corrected through LNM Aug. 31/04

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the I
Mariners (LNM
dates shown in

This nautical chart has been designed to provide the U.S. Coast Guard with a means of improving this chart to the Chief, Marine Chart Service, NOAA, Silver Spring, Maryland 20910

16

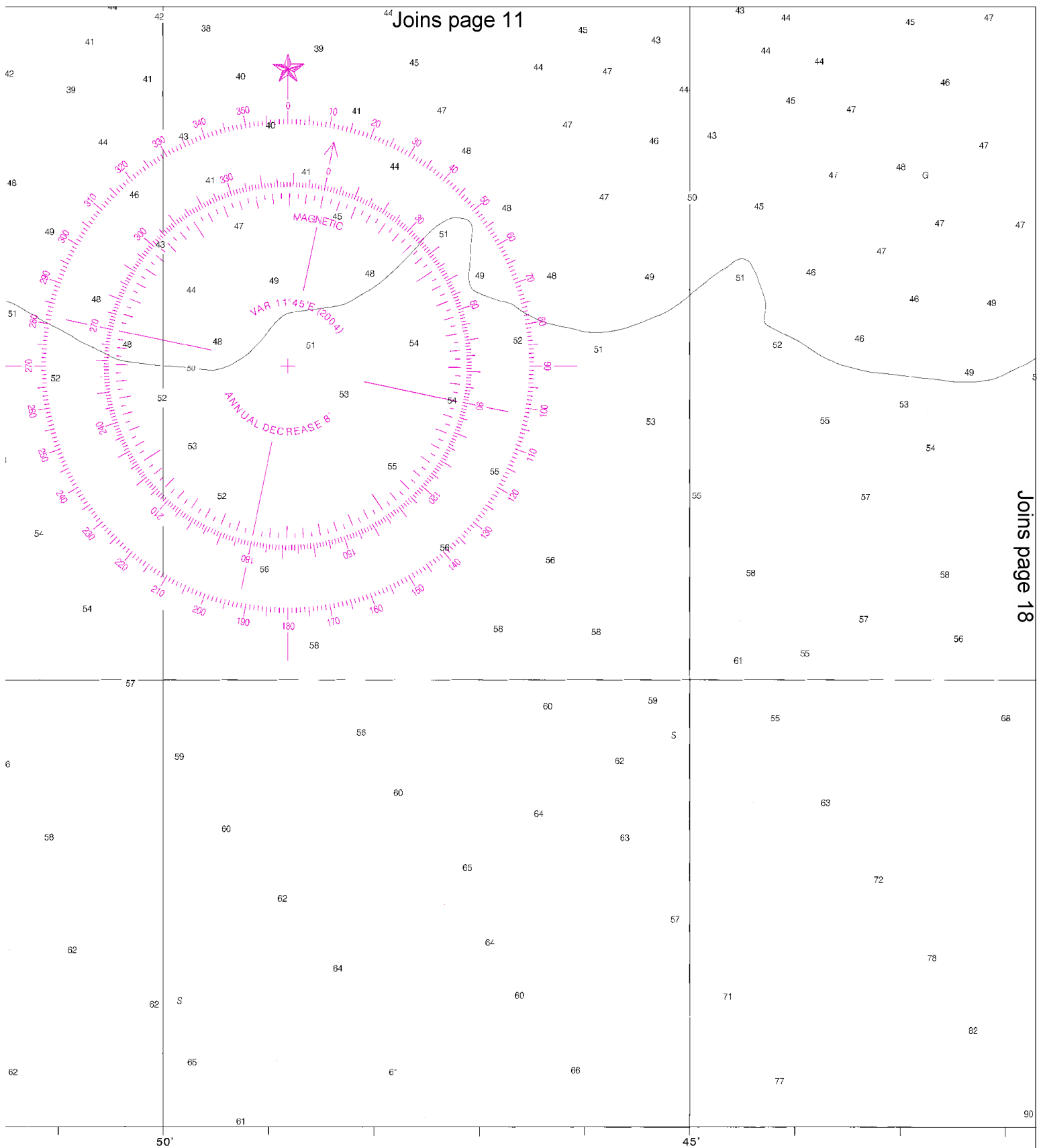


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SCALE 1:40,000
Nautical Miles

See Note on page 5.

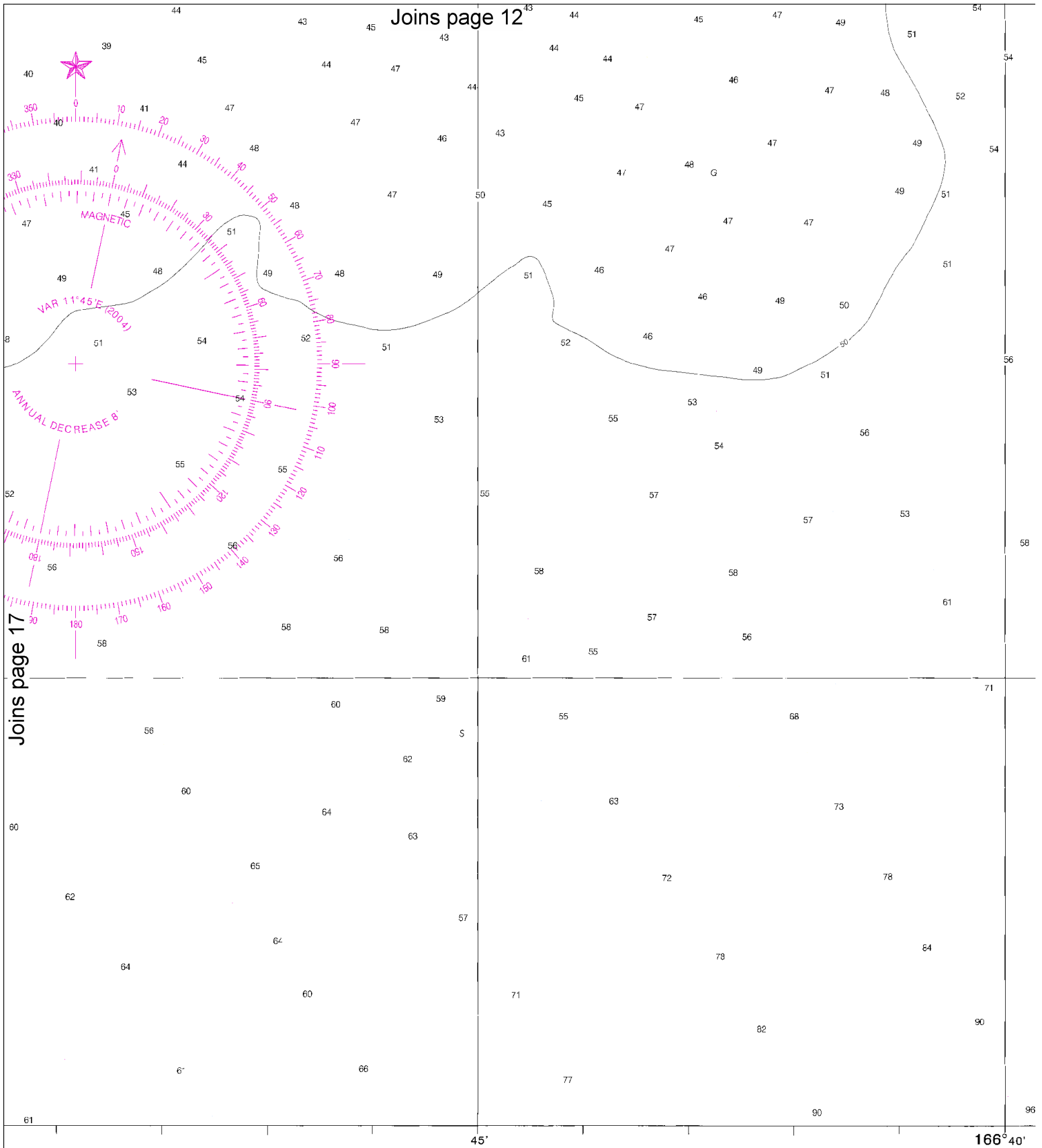




To promote safe navigation, The National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282, provides corrections, additions, or comments for this chart to the National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

SOUNDINGS IN FATHOMS

UPDATING SERVICE
FOR THIS CHART, a listing of NOTICE TO MARINERS (NM) corrections subsequent to the NM corrected through date shown in the lower left hand corner, is available from the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.



Joins page 17

SOUNDINGS IN FATHOMS

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UPDATING SERVICE

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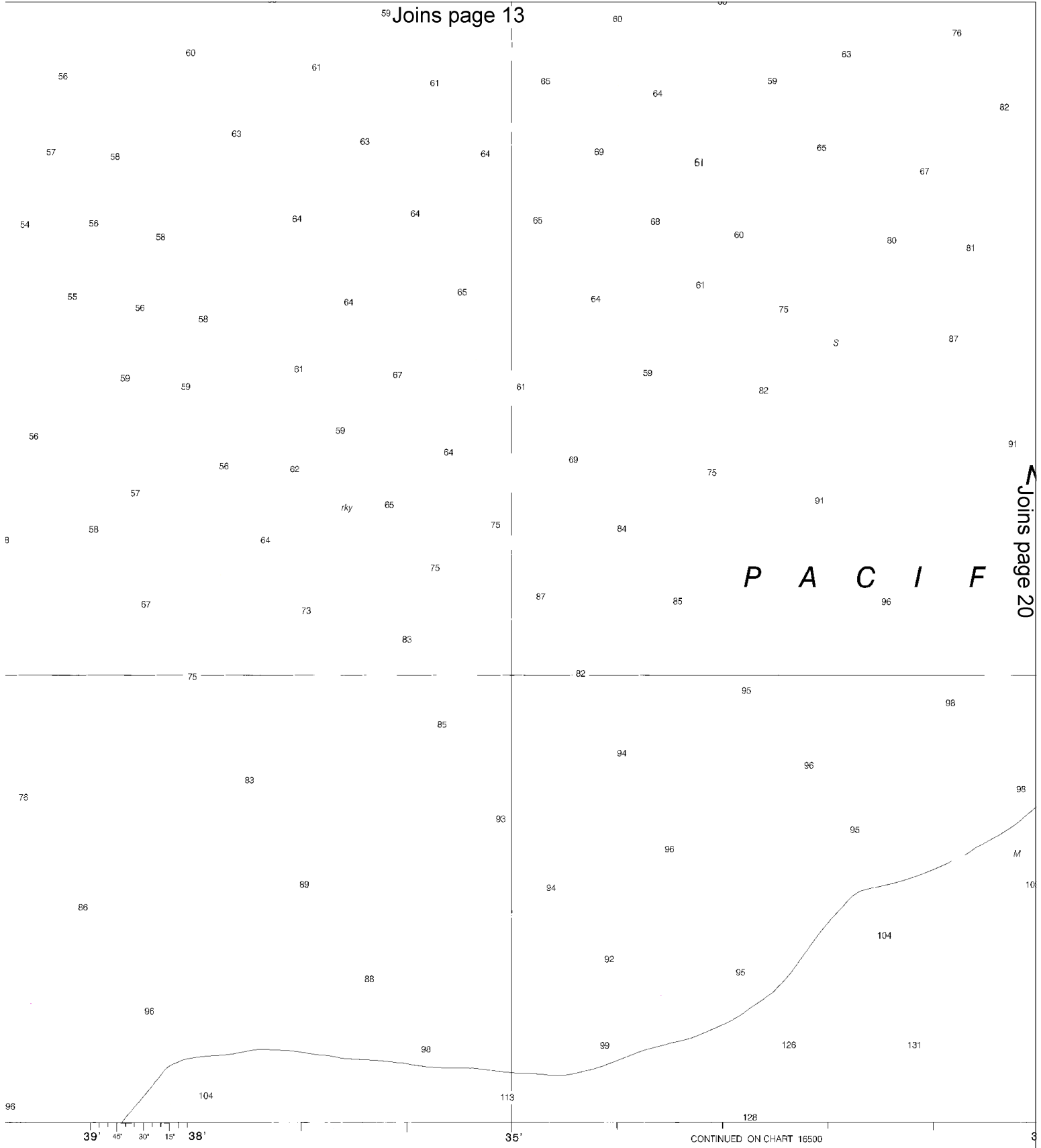


Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.





Published at Washington, D.C.
 U.S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE
 COAST SURVEY

Joins page 14

Joins page 19

N O R T

P A C I F I C

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 9. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.
Refer to charted regulation section numbers

Washington, D.C.
DEPARTMENT OF COMMERCE
ATMOSPHERIC ADMINISTRATION
OCEAN SERVICE
CHART SURVEY

This chart is available in a version with corrections. Charts are printed when available 5-8 weeks before their release. Print-on-Demand charts.

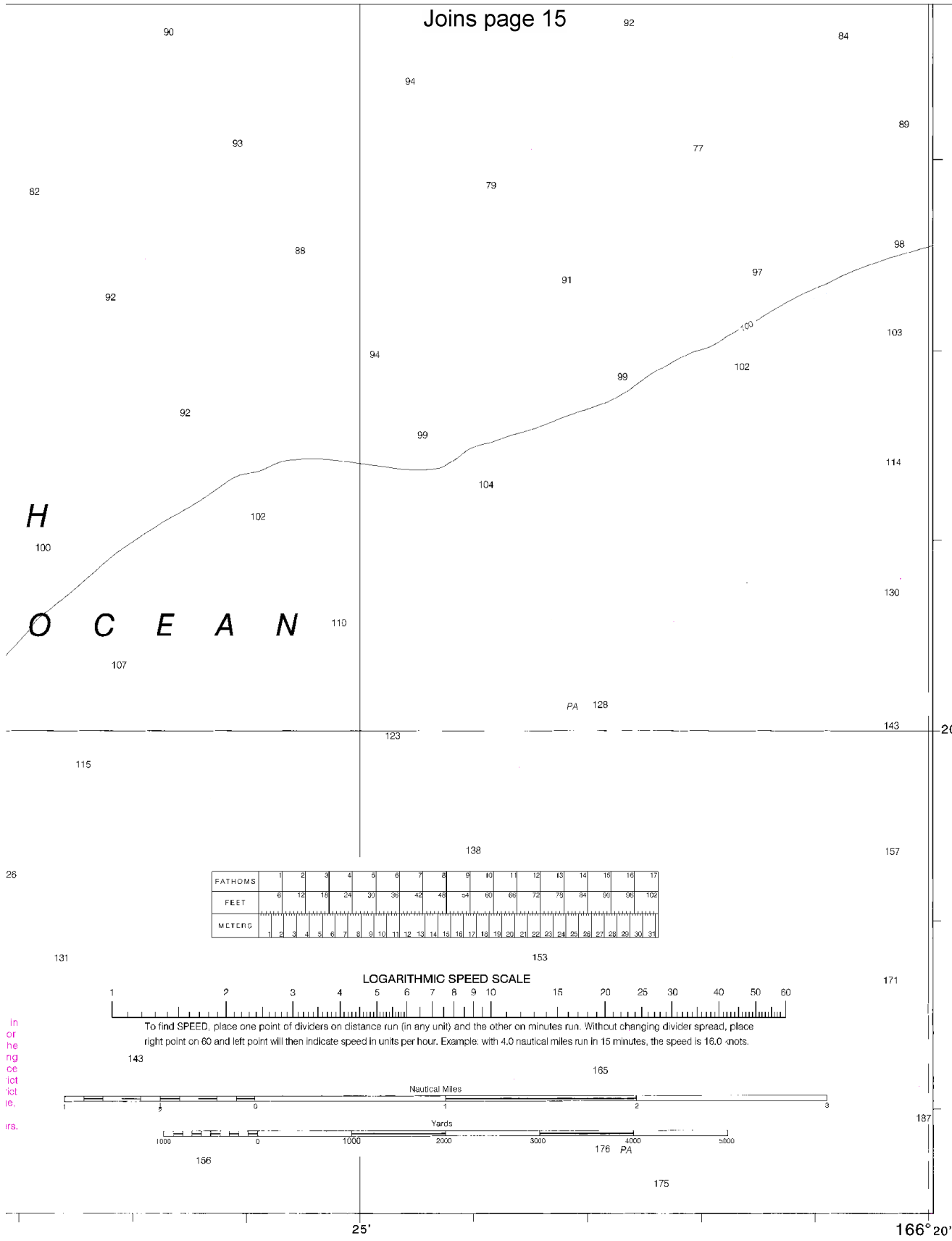


Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.





ED. NO. 6

NSN 764201401366

NGA REFERENCE NO. 16XHA16521

PRINT-ON-DEMAND CHARTS
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 information. It is not to be used for navigation. New Editions are
 available as traditional NOAA charts. Ask your chart agent about

Protection Bay to Eagle Bay
 SOUNDINGS IN FATHOMS

16521

21

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue (Pacific Coord) – 510-437-3700

Coast Guard Search & Rescue (RCC Juneau) – 907-463-2000

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.